## 07000 - THERMAL AND MOISTURE PROTECTION

DESIGN

A. A metal coping system is preferred over a stone or precast coping system. The Project Manager must specifically approve use of a stone or precast coping.

B. Anodized aluminum soffit panels are preferred if the project budget permits. Gypsum board (drywall) is not acceptable at exterior soffits.

C. The Project Manager must specifically approve use of skylights on the project.

D. No asbestos containing materials are to be specified for roofing, insulation, fire stopping, fireproofing or any other materials on the project.

E. Adequate attic stocks for each type of sealant used must be required in specifications.

F. Pitch pockets should be avoided to the extent possible and should not be used where pipe columns penetrate the roofing system. An alternate method such as typical vent flashing should be used at pipe columns. All pitch pockets shall be fabricated from stainless steel or cooper, be half-filled with non-shrink grout and a pourable sealer, and shall comply with NRCA recommendations.

G. Roof drain design must be coordinated with roof ballast specifications to ensure that ballast does not clog the drains. Specify screens at roof drains, as required.

H. The use of internal gutter systems shall be avoided.

I. All roofs will be designed with a fall protection system as required by OSHA regulation 1926 Subpart M – Fall Protection (1926.500 to 1926.503).

J. All skylights will have a screen that complies with 29 Code of Federal Regulation CFR 1910.23(a)(4) which reads *"Every skylight floor opening and hole shall be guarded by a standard skylight screen or a fixed standard railing on all exposed sides"* or be constructed with material that meets the OSHA requirements to withstand accidental fall of person on the skylight.

K. All roof access hatchways will be protected as required by 29CFR 1910.23(a)(8) *"Every floor hole into which persons can accidentally walk shall be guarded by either: (i) A standard railing with standard toeboard on all exposed sides, or (ii) A floor hole cover of standard strength and construction."*

PRODUCTS

A. Fairfax County's preference is for Johns Manville or GAF built-up 3 or 4 ply systems with nominal 15 or 20 year warranties, respectively. In cases where single ply elastomeric membranes are appropriate and beneficial, the preference is for modified bitumen systems by Johns Manville, Firestone or U.S. Intec with standard 10, 12 or 15-year warranties.

In some instances, rubber membranes may be acceptable, the preference is EPDM, Goodyear, Firestone, and Carlisle 60 mil systems are the minimum acceptable. PVC and CPE systems are not recommended. Further, ballasted single ply systems are not recommended because of poor maintenance and performance histories. Fully adhered single ply systems are preferred. In cases where roof top mechanical equipment is involved, paver's should be provided to minimize accidental or incidental membrane damage. Concrete paver's should be used only as recommended by manufacturer. Compatible "membrane paver's" are acceptable. Non-curb mechanical equipment should be supported by platforms with pipe columns with umbrella flashings where applicable. Height of column should be a minimum of 8" above roof membrane.